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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,519	11/09/2000	Satoru Nippa	2185-480P	1737

2292 7590 02/04/2002

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

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DATE MAILED: 02/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/708,519

Applicant(s)

NIPPA, SATORU

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-4 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Election/Restrictions**

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-2, drawn to resin composite, classified in class 524, subclass 437.
  - II. Claims 3-4, drawn to method for producing a resin composite, classified in class 523, subclass 333.

2. The inventions are distinct, each from the other because:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as melting the resin, incorporating the aluminum hydroxide, and cooling the mixture to yield a solid composite or mixing a powdered resin with aluminum hydroxide and then compacting the mixture to form a solid composite.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with John Bailey on 1/25/02 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-2. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3-4 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicants are advised that since Group I, drawn to the product, has been elected, and in the event that the product claims are subsequently found allowable, and further, the withdrawn process claims of group II are amended to depend from or otherwise include all the limitations of the allowable product claims, then the process claims of Group II will be rejoined with the product of Group I. See MPEP 821.04.

**Claim Rejections - 35 USC § 112**

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites and improper Markush group. It is suggested that the phrase “the group consisting of” is inserted in line 2 after “from” and before “vinyl acetate”. Alternatively, it is suggested that applicant replace “and” in line 7 with “or”.

**Claim Rejections - 35 USC § 102**

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Marti et al. (U.S. 6,207,775).

Marti et al. disclose a resin composite comprising a resin and filler such as aluminum hydroxide having an average particle size of 0.1-5  $\mu\text{m}$  (col.2, lines 9-12, col.4, lines 1-3 and 57). Given that the average particle size is the size of the aluminum hydroxide without agglomeration (col.5, lines 9-15), it is clear that this is equivalent to the primary particle size.

Using the specification as a dictionary in order to define the Y/X index (see MPEP 2111.01), it is noted that page 5, lines 20-24 and page 6, lines 1-3 define the index as a measure of the degree of dispersion of the aluminum hydroxide in the resin and that the higher the

dispersion degree, the smaller the index. Therefore, although there is no explicit disclosure in Marti et al. that the composite has index  $Y/X$  of 0.1 or less as presently claimed, given that Marti et al. disclose that the composite is homogeneous in that the filler is uniformly dispersed in the polymer matrix (col.14, lines 61-63) and in light of the definition of the  $Y/X$  index as described above, it is clear that the composite of Marti et al., which possesses very high degree of dispersion, i.e. composite is homogeneous, would inherently possess index  $Y/X$  of 0.1 or less as presently claimed.

In light of the above, it is clear that Marti et al. anticipates the present claims.

10. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (U.S. 4,491,553).

Yamada et al. disclose a resin composite comprising a resin such as ethylene/vinyl acetate copolymer, polybutadiene, polyisoprene, polystyrene, and chloroprene rubber and filler such as aluminum hydroxide having average particle diameter of 0.01-50  $\mu\text{m}$  (col.3, lines 13-15 and 66-7, col.5, lines 15-19, 21-22, 35, and 42). Given that the average particle diameter is the size of the aluminum hydroxide based on the particle size distribution of the aluminum hydroxide, and not on agglomerated particles, it is clear that this is equivalent to the primary particle diameter as presently claimed.

Using the specification as a dictionary in order to define the  $Y/X$  index (see MPEP 2111.01), it is noted that page 5, lines 20-24 and page 6, lines 1-3 define the index as a measure of the degree of dispersion of the aluminum hydroxide in the resin and that the higher the dispersion degree, the smaller the index. Therefore, although there is no explicit disclosure in

Yamada et al. that the composite has index Y/X of 0.1 or less as presently claimed, given that Yamada et al. disclose that the dispersion of the filler in the resin is very uniform (col.6, lines 19-21) and in light of the definition of the Y/X index as described above, it is clear that the composite of Yamada et al., which possesses high degree of dispersion, i.e. filler is very uniformly dispersed, would inherently possess index Y/X of 0.1 or less as presently claimed.

In light of the above, it is clear that Yamada et al. anticipates the present claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saito et al. (U.S. 4,879,332), Ezawa et al. (U.S. 6,242,522), and Nippa et al. (U.S. 6,130,283) each disclose composite containing resin and aluminum hydroxide, however, there is no disclosure in any of the references of the degree of dispersion of the aluminum hydroxide in the resin or the index Y/X.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

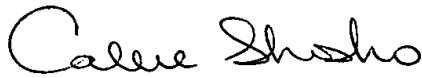
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho  
Examiner  
Art Unit 1714

  
Callie Shosho  
January 31, 2002